

## DOCUMENT RESUME

ED 275 763

TM 860 680

AUTHOR Bird, Lisa  
TITLE Effects of Help, Anonymity, and Privacy on Children's Academic Expectations.  
PUB DATE Apr 86  
NOTE 20p.; Paper presented at the Annual Meeting of the American Educational Research Association (67th, San Francisco, CA, April 16-20, 1986).  
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Correlation; \*Expectation; Foreign Countries; \*Helping Relationship; Intermediate Grades; Interviews; Memory; Predictor Variables; \*Privacy; \*Sex Differences; Simulation; \*Testing  
IDENTIFIERS \*Help Seeking; New Zealand

## ABSTRACT

This study examined the effect of three aspects of the testing context--physical privacy, anonymity, and offers of help from a tester--on children's expectations. Performance of 96 11-year-old boys and girls on a pictorial recall memory task in a simulated test was evaluated. The subjects were divided into eight different groups varying on the three factors. The strongest effect on expectations was from the variable of help offered, which acted to depress expectations. Though there were the predicted gender differences in expectations, the help variable appeared to disadvantage girls and boys similarly, and to mediate the effects of other variables. Results of extensive interviews carried out with the children supported an interpretation based on the idea that an offer of help may be interpreted by the child from an "ego-involved" perspective, for example, as a sign that the adult has a poor opinion of the child's capabilities. (Author/JAZ)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

EFFECTS OF HELP, ANONYMITY, AND PRIVACY ON  
CHILDREN'S ACADEMIC EXPECTATIONS

Lisa Bird  
Education Department  
Victoria University of Wellington

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

L. Bird  
\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

☒ This document has been reproduced as  
received from the person or organization  
originating it.

☐ Minor changes have been made to improve  
reproduction quality

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy

Paper presented at the meeting of the American Educational  
Research Association, San Francisco, April, 1986.

### Abstract

An experimental study was carried out in order to examine some of the effects of a public versus private testing situation on the academic expectations of children. Studies with adults suggest that expectations are likely to be higher in private than in public, because of pressures towards public modesty (Schlenker and Leary, 1982). However, there is some doubt about whether this is equally true for females and males, since girls may be modest in both private and public judgements. The present study varied three aspects of the testing context in order to determine the salience of the variables of physical privacy, anonymity, and offers of help from an adult tester on children's expectations. The 96 11-year olds in the study made expectations about their performance on a pictorial recall memory task in a simulated test environment. There were eight different groups varying on the three factors. The strongest effect on expectations was from the variable of help offered, which acted to depress expectations. Though there were the predicted gender differences in expectations, the help variable appeared to disadvantage girls and boys similarly, and to mediate the effects of other variables. Results of extensive interviews carried out with the children supported an interpretation based on the idea that an offer of help may be interpreted by the child from an "ego-involved" perspective, for example, as a sign that the adult has a poor opinion of the child's capabilities.

Research on students' expectations about a future performance has been carried out inside a number of theoretical frameworks and for many different purposes, but a common finding has been that females have lower expectations than males (e.g., Crandall, 1969; Lenney, 1977). One of the crucial factors mediating the gender differences seems to be the work context in which the performance is embedded. In one study (Bird, 1984) girls had lower expectations when tested anonymously and privately rather than in a more public condition, in comparison to boys, whose expectations were even higher in private. Interest in the nature of the work context regarding its public or private exposure stems from attribution research on the self-enhancing bias hypothesis (for a recent review see Covington, 1984). This hypothesis argues that people attribute the causes of their failure to different factors than those used to explain their successes to stable, personal qualities. According to Baumeister (1982) judgements made in public might tend towards modesty, as there are public sanctions against boastfulness (see Schlenker and Leary, 1982). This theoretical view would seem to offer interesting implications for research on expectations, as these are clearly statements about personal competence at a task. Of course, any self-judgement would depend on the person's perceptions of the whole context in which the task is embedded. The interesting angle for studies looking for gender differences is that social pressure might differentially affect the public expectation judgements of girls and boys, as there might be greater social desirability for boys to give self-enhancing judgments (cf. Parsons, Ruble, Hodges, and Small, 1976).

The present study is an attempt to separate empirically several aspects of the work context concerned with the private or public nature of expectations

made by children. Defining public and private testing conditions in order to test modesty versus self-enhancing response biases is fraught with difficulty, as obviously there is no testing situation which can be thought of as completely private, since the student has to be put into some sort of testing situation involving interaction with a tester, and has to make a public response which could be examined by another person. One purpose of the present study is to look closely at three variables, each of which might contribute differentially to the hypothesized gender differences in expectations: the anonymity of the testing situation, the presence or absence of a screen to work behind during testing, and comments from the experimenter offering or not offering help to the student. Each variable is related to the degree of public involvement in the child's performance, and provides a test of the hypothesis that children are more modest under conditions of greater public involvement. Another purpose of the research is to examine whether this hypothesis holds for girls as well as boys.

A lack of anonymity might make a student self-monitor in a way more cognisant of a "generalised other" (cf. Mead, 1934); putting names on the test sheet clearly signals that the student's responses may be viewed by others, such as the child's teacher or peers. According to the modesty-in-public view, children would state higher expectations for themselves in a setting without anonymity.

The presence or absence of a screen might have a different effect on the experimental context, changing the relationship between tester and student. The student without a screen might feel greater constraints of the social situation, perhaps taking into greater account the perceived importance of

the tester and the likelihood of encountering the tester in the future. This could lead to greater pressures towards public modesty and lower expectations. However, in examining gender differences in expectation it is possible that more private testing conditions could create a distancing effect between the tester and student; such a feeling of social isolation might affect girls more than boys (C. Dweck, personal communication, 1983). If so, girls working with a screen would have lower expectations than boys.

The third independent variable was verbal instruction from the tester either offering help to the student or explaining that no help could be given. Offers of help from the tester might serve to create a warmer, less formal testing situation and reduce pressure on students to give self-enhancing expectations. On the other hand, offers of help might be seen as a cue given by the tester to the student implying that the student has low ability (Meyer, 1982); in this case, help offered might act to depress expectations. Help was considered to be an important variable related to the public nature of the interaction between the tester and child, which is implied in the effect of the other variables under study.

In the present study children were asked to make their expectation judgements concerning a memory task. They were also interviewed extensively after the task, as part of debriefing, in order to learn more about their perceptions of the experimental context.

## METHOD

### Design

There were three independent variables, the presence or absence of anonymity, the presence or absence of a screen during testing, and the presence or absence of an offer of help from the experimenter before testing. These variables were completely crossed with each other to create eight experimental different groups varying in all possible combinations of the three factors.

### Subjects

Six girls and six boys were assigned to each of the eight experimental groups, so that 96 children in all were tested. The average age of the children was 11.83 years, and all were enrolled in sixth grade classes in a large Intermediate school in a New Zealand city. The majority of children were of Anglo-Saxon heritage.

### Materials

The experimental tasks used involved recall memory of 40 pictures of common objects in a large array. Expectation judgements concerned predictions of actual performance at the task, and were made by circling a number from 0 to 40 to indicate the number of items children thought they would be able to recall. There was a shortened practice trial to indicate the child's future expectations if the test were to be attempted again.

## Procedure

Children were tested individually in a quiet room, seated at a table at a 45 degree angle from the female tester. Before the practice session children were given instructions by the tester regarding the anonymity manipulation, and then the screen manipulation. This order seemed to be the most natural one for setting the experimental context. For the anonymous groups, the tester emphasized that no one at the child's school would see the child's responses while for the non-anonymous groups, the tester said to the child: "Be sure to put your name on the booklet so we can know which one is yours." (Names were removed afterwards). For the help groups, the tester said, "Before we start, keep in mind that you can call on me if you need any help", while for the no-help groups the tester said, "keep in mind that I won't be able to give you any help with this." For the screen groups, the tester showed the child the 25cm high screen which was placed between the tester and the child, and said, "I'm going to put up this screen so that I can't see your paper or what you're writing down." For the no-screen groups, no screen was visible and the tester said, "OK - I can see your paper alright from here."

The practice and two test recall sessions were then administered, with students making an expectation before examining each test array for 90 seconds, then given a recall period of a maximum of two minutes in which students could write down the names of the pictures remembered in any order on a sheet of paper lined with 40 numbered lines. Afterwards, there was an interview with each child. Initial questions were given to gauge the adequacy of the experimental manipulations. A 6-point rating scale from "very true" (1) to "not at all true" (6) was explained to children carefully by the tester, who then asked children to rate the extent to which: (1) they thought anyone at their school would see what answers they had given

(the anonymity check), (2) they thought the tester could see what they wrote down during the tests (the screen check), and (3) they thought they were able to get any help during the test (the help check).

Children were then asked a series of open-ended questions, with followup probes, concerning their views of doing work in classrooms with or without the presence of a teacher, as well as their general views on working with or without help, and from whom the child would seek help. Children were also asked how they felt about working when someone in class could see their work, and whether it mattered to them if their peers knew their grade on an assignment. These questions were used to gain further information about the perceptions children have of the larger issues involved concerning the experimental factors under study, and provided the basis for the debriefing of the children, which was a general discussion of how expectations might be different under different circumstances.

### RESULTS

Means for each of the three 40-point expectation judgements are shown in Table 1 for each group. Analyses of variance were carried out on the data, using the .01 level of significance to test effects as a means of reducing the possibility of Type I error. A 2x2x2x2x3 fixed-effects analysis of variance was carried out on the between groups factors of Sex, Anonymity (present/absent), Screen (present/absent), and Help (present/absent) and the within-groups factor of Trial (over the three expectation judgements). There was a significant main effect of Help,  $F(1,67)=6.31$ ,  $p=.01$ , showing that children's expectations were higher under the no-help

condition than under the help condition. There was a significant main effect of Trial,  $F(2,160)=10.06$ ,  $p<.01$ , showing a large drop in expectations from the first trial to lower expectations for the second and third trials. There was a significant Sex by Trial interaction,  $F(1,160)=5.74$ ,  $p<.01$ ; boys' expectations, though higher than girls' for each trial, dropped from the first trial to the succeeding trials more than did girls' expectations. No other main effects or interactions were significant.

---

Place Table 1 about here

---

To determine the accuracy of the children's expectations on the first two trials, in which their judgements could be compared with their performance, a score was created in which the total number of items recalled by the child was subtracted from the number of items the children expected to recall. These accuracy scores could range from extreme underestimation of performance at -40 to extreme overestimation at 40, with zero as an accurate prediction. Means of these accuracy scores for each group are also shown in Table 1. A 2 fixed-effects analysis of variance was carried out on the between groups factors of Sex, Anonymity (present/absent), Screen (present/absent), and Help (present/absent), and the within-groups factor of Trial. There was a significant main effect of Sex,  $F(1,80)=16.08$ ,  $p<.01$ , showing that girls' expectations ( $M= 0.47$ ) were more accurate than those of boys ( $M=3.4$ ). There was a significant main effect of Trial,  $F(1,80)=6.72$ ,  $p<.01$ , showing that expectations were higher and less accurate for the first trial than for the second. Finally, there was a significant Anonymity by Help by Trial interaction,  $F(1,80)=6.39$ ,  $p<.01$ , showing different amounts of improvement in accuracy of expectation (i.e., less overestimation) in the four relevant groups from the first to the second trial. Though overall accuracy did improve on the second trial, the

the no-anonymity/help group was the most accurate initially, and remained so, while the anonymity/no help group was inaccurate over both trials.

With regard to the test of the adequacy of experimental manipulations, means of the 6-point ratings of children's perceptions of the variables of help, screen, and anonymity are shown in Table 2. Each set of ratings was subjected to a 2 fixed-effects, between-groups analysis of variance on the factors of Sex, Anonymity, Help, and Screen. For the ratings concerning whether or not the child's answers could be seen, there was a significant main effect of Screen,  $F(1,80)=56$ ,  $p<.01$ , with means in the predicted direction. For the ratings concerning whether or not the child perceived help to be available, there was a significant main effect of Help,  $F(1,80)=23.83$ ,  $p<.01$ , as predicted. For the ratings concerning whether or not the child thought anyone at their school would see their answers, there was no significant main effect of Anonymity,  $F(1,80) < 1.3$ , but there was a notable interaction between Anonymity and Screen,  $F(1,80)=4.86$ ,  $p<.05$ . Under conditions of anonymity, children with screens were more certain than children without screens that no one would see their answers ( $M_s = 4.9$  and  $5.7$ , respectively); in contrast, though, for the non-anonymous condition, children without screens were more confident that no one at their school would see their answers ( $M_s = 4.6$  and  $5.2$ , respectively).

Finally, from the open-ended responses, it is interesting to look at the numbers of girls and boys in the groups given help versus the groups not given help to see how many said they liked or did not like receiving help. Whereas 11 girls in help groups said they liked help, only 4 in no-help groups said they liked help (7 of the former group and 4 of the latter were uncertain). On the other hand, 6 of the help group and 16 of the no-help group said they didn't like having help usually; this difference in frequencies between the groups of liking versus not liking help was

significant with a Fisher probability of .02. For boys there was a similar pattern but the Fisher test carried out on the frequencies was not significant. As an addendum to the information on help, a record was made of the children actually requesting help. Seven boys in help groups and seven in no-help groups made requests for help. For girls in help groups, 8 made requests for help, while in no-help groups only 4 girls made these requests. These frequencies were not significantly different when subjected to a Fisher test.

### DISCUSSION

There was a powerful effect of the help variable on the expectations, which were higher when the tester said no help could be given. This result supports Meyer's (1982) finding that help can be a negative form of feedback for students when offered by teachers, because it may signal a perception of low ability. Though there was the well-established finding (e.g., Bird, 1984) of gender differences in expectations over trials, with girls tending to have similar expectations over trials and boys starting the task with very high expectations which decreased somewhat after experience with the task, there was no significant interaction between gender and offers of help. Thus girls and boys may be similarly disadvantaged in their expectations by offers of help. Children's responses to the open-ended questions bore this out; similar numbers of girls and boys said that they did not like receiving help.

The present research also fits in with other research showing that there are subtleties in adults' communication of beliefs about abilities of children. One study (Weiner, Graham, Stern and Lawson, 1982) found

an adult's response of pity to a child's failure to be more likely than a response of anger to lead even a 9-year-old child to inferences of lower ability. Further, Graham's (1983) study showed that an adult's response of sympathy to a child's failure was associated with attributions of low ability and lower expectations, while a response of anger was associated with greater attributions of ability and higher expectations. It seems that offers of help may be perceived by children as motivated by pity, or at least of unusual concern.

From the present study we cannot know how children perceived the help offered; in the interviews after testing the children's responses indicated a variety of views of helping. To the question asking whether they "like having someone around to help you during a test like the ones you just had", 34% clearly said they liked help, while 44% said they preferred not having help. There were many children whose answers could not be classified, and many responses which indicated complexity in the children's reasoning about the issue of helping, such as from a boy who said it "depends on how bright I am." A number of children pointed out that they would ask for help only for form-related matters (e.g., pronunciation, reading a question) and not with regard to the content of a test question. For example one boy said:

"Like, say, it was a picture. I'll ask her, 'what was that picture?' I wouldn't ask her for the answer or anything like that."

An ego-involved view of the meaning of help as opposed to a more task-involved one (cf. Nicholls, 1984) was evident in many answers, such as from the girl who said:

"Well, I don't think it's fair if someone else helps me 'cause it's not my work."

This is quite a different response to the girl who said:

"If I was really stuck I wouldn't mind having  
someone to help me."

Only one child, a boy, seemed to interpret help in a way that did not have any connection to testing or evaluation of ability, by simply saying, "I like having company". It would be difficult to make a meaningful quantitative analysis of the interview responses, because the views expressed would undoubtedly be limited by the children's ability to make a verbal analysis of their feelings. However, these data do indicate that a simple statement from an adult experimenter regarding help is interpreted by the child in the context of very complex ideas about evaluations of personal ability and about the nature of social relationships in a classroom setting.

The test of the adequacy of the anonymity condition revealed an interaction between the variables of a physical screen and anonymity. Children in the anonymous groups were more certain of anonymity when they had a screen. Since the children were asked if anyone would "see their answers", because it was assumed that they would not know the meaning of the word "anonymity", the finding could have been a misunderstanding by the children, who of course knew that the tester (who was, after all, AT the school that day) had seen their answers. However, the no-anonymity children were more confident of anonymity when there was no screen; this suggests that the screen may have "upped the ante" in making these children evaluate the situation as a formal testing context where they would feel most concerned about who would see their "test" answers. In the open-ended questioning several children discussed the usefulness of the screen as a means of ensuring that no one would cheat, which suggests that a screen produces a very formal

testing context with the greatest concerns about a public performance. On the other hand, children assured of anonymity and in the no-screen condition may have had a more direct one-to-one relationship with the tester without the barrier of the screen, perhaps creating a warmer atmosphere for the task. The fact that several children (four boys and two girls) mentioned in the open-ended questions that the screen made them feel lonely or cut off supports this. The variety of reactions of the children to the screen shows that a simple cardboard barrier is perceived as quite a different stimulus by different children. Thus, this study did not throw further light on the differential contributions of screening and anonymity to children's performance expectations.

The help variable was not only a strong effect on its own, but appeared to interact with the other variables in complex ways. One interesting finding was the interaction between anonymity and help variables on the accuracy of the children's expectations over time. Each of the four groups varying in degree of anonymity and help produced a different pattern of expectations over trials. Perhaps this is not surprising when the context surrounding each of the four groups is analysed; the degree of formality of the testing context for children who are asked not to give their name to the tester and told not to ask for help is quite different compared to that for children who have had more personal involvement with the tester by giving their name and thinking they could ask for help. This degree of formality could well provide a "set" for the amount of ego-involvement which the child experiences in that context. However, using an experimental manipulation to attempt to create contexts differing in formality or ego-involvement appears to be lacking in the subtlety needed to reveal the impact of these contexts on children coping with evaluative experiences in the classroom.

In conclusion, this study did reveal debilitating effects on children's expectations of offers of help from an adult tester, who could be seen as providing a role similar to that of a classroom teacher during a test. The present findings fit well with the growing literature concerned with subtle effects of teacher feedback on students' self-perceptions. There were marked effects of help in the present study even though no help was actually given to the children under any of the conditions; a simple offer of help appeared to be enough to dampen children's expectations.

REFERENCES

- Baumeister, R.F. (1982). A self-presentational view of social phenomena. Psychological Bulletin, 91, 3-26.
- Bird, J.E. (1984). Gender differences in expectations of children when anticipated feedback and anonymity are varied. Genetic Psychology Monographs, 110, 309-325.
- Covington, M.V. (1984). The motive for self-worth. In R.E. Ames and C. Ames (Eds.), Research on Motivation in Education. Vol. 1. Student Motivation, N.Y. Academic Press
- Crandall, V.C. (1969). Sex differences in expectancy of intellectual and academic reinforcement. In C.P. Smith (Ed.), Achievement-Related Motives in Children, N.Y. Russell Sage
- Graham, S. (1983, April). Communicated sympathy and anger as determinants of self-perception and performance among Black and white children. Paper presented at the meeting of the American Educational Research Association, Montreal.
- Lenney, E. (1977). Women's self-confidence in achievement settings. Psychological Bulletin, 13, 1-13.
- Mead, G.H. (1934). Mind, self, and society. Chicago: University of Chicago Press.
- Meyer, W.-U. (1982). Indirect communications about perceived ability estimates. Journal of Educational Psychology, 74, 888-897.
- Nicholls, J.G. (1984). Conceptions of ability and achievement motivation. In R.E. Ames and C. Ames (Eds.), Research on Motivation in Education Vol. 1: Student Motivation. NY: Academic Press

- Parsons, J.E. Ruble, D.N., Hodges, K.L., and Small, A.W. (1976) Cognitive-developmental factors in emerging sex differences in achievement-related expectancies. Journal of Social Issues, 32, 47-61.
- Weiner, B. Graham, S. Stern, P. and Lawson, M.E. (1982). Using affective cues to infer causal thoughts. Developmental Psychology, 18, 278-286.

TABLE 1

Means of Expectations\* and Accuracy of Expectations\*\*  
for Each Group by Gender and Over Trials

| Group                               | Gender | Expectation<br>Trial |       |       | Accuracy<br>Trial |       |
|-------------------------------------|--------|----------------------|-------|-------|-------------------|-------|
|                                     |        | 1                    | 2     | 3     | 1                 | 2     |
| Anonymity,<br>Help, Screen          | Girls  | 13.60                | 11.67 | 12.33 | 2.27              | -0.83 |
|                                     | Boys   | 21.50                | 15.33 | 14.17 | 7.00              | 2.16  |
| Anonymity,<br>No Help, Screen       | Girls  | 11.75                | 14.00 | 13.40 | -3.42             | 0.83  |
|                                     | Boys   | 19.83                | 16.83 | 17.50 | 6.16              | 4.23  |
| Anonymity,<br>Help, No Screen       | Girls  | 15.00                | 11.50 | 11.50 | 2.40              | 0.50  |
|                                     | Boys   | 17.00                | 14.00 | 12.20 | 5.00              | 3.17  |
| Anonymity, No<br>Help, No Screen    | Girls  | 17.33                | 16.20 | 17.17 | 2.53              | 2.03  |
|                                     | Boys   | 18.50                | 15.67 | 15.80 | 4.17              | 1.47  |
| No Anonymity,<br>Help, Screen       | Girls  | 14.50                | 15.00 | 16.00 | -0.67             | 0.17  |
|                                     | Boys   | 13.33                | 16.17 | 13.17 | 1.00              | 2.67  |
| No Anonymity,<br>No Help, Screen    | Girls  | 14.20                | 11.17 | 13.25 | 4.03              | -0.83 |
|                                     | Boys   | 13.83                | 12.83 | 14.50 | 2.83              | -0.42 |
| No Anonymity,<br>Help, No Screen    | Girls  | 11.33                | 13.00 | 13.00 | -0.84             | -0.67 |
|                                     | Boys   | 14.83                | 13.33 | 12.33 | 2.83              | 0.53  |
| No Anonymity, No<br>Help, No Screen | Girls  | 12.80                | 13.50 | 13.80 | 0.47              | -0.50 |
|                                     | Boys   | 21.83                | 17.33 | 15.67 | 8.63              | 3.66  |

\*40-point scale of number of items to be recalled.

\*\*Expectation of recall minus number of items actually recalled.

TABLE 2

Means Ratings\* of Adequacy of Variable Manipulation  
for Each Group by Gender

| Group                               | Gender | Variable  |        |      |
|-------------------------------------|--------|-----------|--------|------|
|                                     |        | Anonymity | Screen | Help |
| Anonymity,<br>Help, Screen          | Girls  | 5.00      | 4.00   | 3.67 |
|                                     | Boys   | 5.33      | 4.67   | 4.17 |
| Anonymity,<br>No Help, Screen       | Girls  | 4.67      | 4.83   | 5.67 |
|                                     | Boys   | 4.50      | 3.83   | 5.00 |
| Anonymity,<br>Help, No Screen       | Girls  | 6.00      | 2.67   | 4.67 |
|                                     | Boys   | 5.83      | 2.83   | 3.33 |
| Anonymity, No<br>Help, No Screen    | Girls  | 5.83      | 2.33   | 5.33 |
|                                     | Boys   | 5.00      | 1.83   | 5.17 |
| No Anonymity,<br>Help, Screen       | Girls  | 5.67      | 5.50   | 2.67 |
|                                     | Boys   | 5.00      | 5.83   | 3.33 |
| No Anonymity,<br>No Help, Screen    | Girls, | 5.50      | 4.83   | 5.67 |
|                                     | Boys   | 4.67      | 4.83   | 5.33 |
| No Anonymity,<br>Help, No Screen    | Girls  | 4.67      | 1.83   | 3.17 |
|                                     | Boys   | 5.33      | 2.50   | 2.67 |
| No Anonymity, No<br>Help, No Screen | Girls  | 4.33      | 1.33   | 5.50 |
|                                     | Boys   | 4.17      | 4.17   | 4.33 |

\*Higher ratings indicate greater belief in anonymity, visibility of work, and ability to get help the test context.